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## **A Qualitative Interviewing Finding of Customer Perceptions in Livestreaming Commerce**

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### **Abstract**

The majority of published research on live-streaming commerce employs a quantitative survey method, and the theoretical model differs based on different deductive reasoning. Based on the transcripts of thirty-nine informants in in-depth interviews, this study identifies significant roles of information and knowledge (I&K) and behavioral activation, leading to S-I&K-O-R and S-O-B-R as extended versions of the popular stimulus-organism-response (S-O-R) framework of consumer behaviors. The behavioral term indicates that live streaming requires a higher level of active viewer or consumer engagement by making use of the live streaming technologies and their unique features such as synchronicity and feedback. Additional insights include anchor personality, expressed voices and presentation, ethicality, consumer mood, the ability to incorporate items into the lives of viewers and customers, environmental psychology, affinity, vicarious experience, and technical hurdles.

**Keywords:** *live-streaming, e-commerce, stimulus-organism-response (S-O-R) theory, interview*

### **1.Introduction**

Livestreaming commerce is a new shopping channel based on electronic social commerce that employs live streaming to deliver an engaging, informative, and immersive online purchasing experience, completely transforming the old electronic commerce business model (Lo et al., 2022). By merging Internet-enabled technologies like live chat interface and live broadcasting with video, live streaming has moved to the top of the e-commerce sales strategies list (Fei et al., 2021). In China, live streaming commerce has evolved into a new type of retail (Zhou et al., 2021).

Researchers study various factors that influence people's decisions on online purchases, such as e-commerce live streaming (Fei et al., 2021). Interactivity (Yi et al., 2015), marketing creativity (Yi et al., 2015), emotional contagion (Meng et al., 2021), and impulsivity are some of the factors significantly essential to the live streaming business (Lo et al., 2022; Ye and

Tan, 2022a, b, c).

In the psychological domain, flow (Csikszentmihalyi, 1999), cognitive absorption (Agarwal and Karahanna, 2000), and engagement are common variables studied, and these terms are frequently intertwined; for example, engagement is a behavioral state that can induce cognitive absorption and flow experience (Webster and Ho, 1997). The ability of anchor to elicit consumer emotions ranges from simple pleasure (the extent to which people feel good, happy, content, and pleased in the context, Cheng et al., 2009) to arousal (the extent to which people feel excited, alert, stimulated, awakened, and positive in a situation, Russell, 1980): leading to more effective or emotional trust (emotion-based confidence that relates to how the customer feels good, happy, content, and pleased in the context, Russell (Meng et al., 2021).

The majority of the research findings, such as the aforementioned factors, can be explained using the S-O-R concept, tracing to Mehrabian and Russell (1974), now being a widely used model of consumer behaviors (Lim et al., 2020). The following provides some of the factors essential to live streaming from the quantitative studies:

**Stimuli:** *social cues (Fei et al., 2020), gamification (Qian et al., 2022), perceived professionalism and telepresence of gastronomy (Yu, Cheah and Liu, 2022), atmospheric effect (Babin and Attaway, 2000), brand authenticity (such as measured by dimensions of continuity, credibility, integrity, and symbolism, Shi et al., 2022), servicescape (Sorrentino et al., 2022).*

**Organism:** *emotional contagion (Meng et al., 2021), customer values (Qian et al., 2022), shopping value (Wongkitrungrueng and Assarut, 2020), brand equity perceptions (such as measured by brand awareness, brand image, perceived quality, and brand loyalty, Shi et al., 2022).*

**Response:** *Engagement (Qian et al., 2022).*

Apart from the commonly considered factors, what else the qualitative method can identify is the goal of this study. Thus, the purpose of this study is:

*to employ qualitative in-depth interviews to identify factors that influence the responses of viewers and consumers, and generate a revision of the S-O-R model.*

## 2. Literature Review and Related Research

Because of their universal validity, the stimulus-organism-response (S-O-R) is a popular theoretical framework for many human behavior studies. According to Kim, Hantulia, and Benedetto (2021), S-O-R shares a confirmation-disconfirmation or resonance-dissonance process. For instance, perceived organizational support (a stimulus) can influence employees' attitudes and self-efficacy (organism), which, in turn, induces external whistleblowing intention (Mansor et al., 2022). E-commerce and its live-streaming variant have jumped into the S-O-R bandwagon.

Alanadoly and Salem (2022) utilize a quantitative survey to validate two categories of stimuli in the context of fashion e-commerce: socio-psychological stimuli

(such as fashion engagement and opinion-seeking) and objective stimuli (such as product variety).

Functional (or utilitarian) value and hedonic value, according to Hirschman and Holbrook (1982), are the result stimulated by the nature of consumers *as either problem-solvers or in seeking fun, fantasy, arousal, sensory stimulation, and enjoyment*.

Not only functional and hedonic values can significantly influence consumers' shopping behaviors (Babin et al., 1994; Ryu et al., 2010), but consumers also search for other values, such as social and epistemic values (Tantucci, Wang and Culpeper, 2022).

Strict adherence to S-O-R may cause researchers to overlook other elements, limiting the scope of applications. Rural communities, for example, are frequently unable to access internet services. According to cognitive load theory (CLT), when consumers believe that their ability to use digital services is beyond their cognitive scope, they will experience cognitive overload and stop utilizing the services (Wang et al., 2020). As a result, Wang et al. (2020) modify CLT to propose the types of external stimuli and organisms that can alter organic states represented by perceived utility and involvement, including information literacy.

Nevertheless, the S-O-R framework, as stated above, applies to a wide range of applications, including live streaming commerce (Ye and Tan, 2022a, b, c, d), and in-depth qualitative research, free of cognitive restraint, can aid researchers in identifying S, O, and R factors not easily covered by quantitative deduction

### 3. Research Methodology

According to Klenke (2016), interviews are a part of everyday life, and everyone has learned about interview skills to some extent from reading interviews in newspapers and watching interviews on television. Despite the extensive use of interviews in the media and throughout society, there is no general definition of interviewing. For this study, the qualitative interviewing provides the empirical data that allows researchers to develop theories to explain phenomena: the S, O, and R insights for live streaming commerce.

Interviewing can be unstructured or structured. The unstructured can help researchers delve deeper into complex issues, ideal for situations when one knows little about the problem (Klenke, 2016: 130). However, given the clarity of the literature review and the introduction context, the study adopts a structured interview approach, sharing logic in absorptive capacity:

*That a sufficient knowledge base is enough to cause more knowledge to be generated (Picaud-Bello, Johnsen and Calvi, 2022).*

A structured interview protocol, consisting, for instance of interview questions, creates “a situation in which the interviewer asks each interviewee a series of pre-established questions with a limited set of response categories” (Klenke, 2016: 128),

with the benefits of “easy to code, the direction of the inquiry is clear, high reliability, the production of comparable data, and the reduction of interviewer bias” (Klenke, 2016: 128). (p. 129).

The following structured questions form the interview protocol, structured using S-O-R concept:

*When choosing to watch an e-commerce live streaming anchor, what aspects of the anchor do you value more? Please be specific.*

*During your interaction with the host (anchor), what do you want to see, hear and feel? In addition, what stimulation do you think should be added to the live streaming commerce process to increase your desire to buy and make you form a lasting memory?*

*What factors will cause you to leave the current live streaming commerce session?*

These questions target on Chinese consumers with live streaming commerce experiences. Participants must have watched any live-streamed commerce session, regardless of whether they purchased anything.

The first author met with the participants to collect data. Thirty-nine people participated in the qualitative in-depth interview using snowball introduction. Saturation is the most common guiding criterion for judging the adequacy of purposive samples in qualitative research (Hennink and Kaiser, 2021:1). “Theoretical saturation” was coined by Glaser and Strauss’ grounded theory (1967) approach to guide researchers in deciding on sample size. Deciding whether to continue locating new informants depends on when the data analysis approaches topic saturation (Hennink and Kiaser, 2021).

#### **4. Results and Discussion**

This section contains a thematic analysis of the transcript verbatim. The analysis seeks to find the unique areas that quantitative researchers may have overlooked/ Many customers have commented about the appearance and voice of the live streaming anchor, and the following are some samples of what they are concerned about:

*“The anchor’s voice should be less rigid and severe and more inviting. I believe that the live streaming anchor should encourage viewers to engage in buying activity and that the voice tone should be caring and reflect a commitment to assisting shoppers.” - The anchorperson (No. 17)*

*“The anchor should be articulate, well-organized in the product introduction, and knowledgeable about the product.” (No. 4)*

*“I sometimes get the impression that the anchor is babbling and does not get right to the point. This gives me a negative image and makes me not trusting the anhor.” (No. 5).*

According to Warhurst et al. (2017), professionals should actively use their voices to influence their audiences’ perceptions, attitudes, and behaviors, primarily

when relying heavily on the media for communication: This includes “stamina, power, intelligibility, and the ability to convey specific moods and attitudes” (e1).

In summary, voice quality, including things like conversational delivery style (Fisher, 1967) and articulation skill (Borrego, Gasparini, and Behlau, 2007), can have a significant impact on vocational and personal benefits, as well as the effectiveness of whatever goals one is trying to achieve.

For online service encounters, the voice-affinity association is portrayed as a significant factor (Creelman, 2022):

*“When watching e-commerce anchors, I will pay more attention to whether the anchor has an affinity with me, and whether her remarks can keep me listening”.* (No. 5).

The in-syn of speaking words (voice quality), aesthetics, and beauty are essential to appease the customers, which Holbrook (1999; 2005) suggests by offering emotional and social values. The aesthetic value experienced by customers or beholders can be intrinsic sense (meaning beauty for the sake of beauty) or self-justification that the beauty perception influences the beholder's physio-psychological reactions (Holbrook, 1994).

Similarly, the understanding of beauty is typologically diversified: extrinsically or intrinsically motivated, things or people-based, concrete or abstract, or more subtle, as reflected in function, symbol, achievement, image, nature, aesthetics, relationships, and character (Holdbrook, 1994: 35).

There are some subtle details to aesthetic and hedonic values. As noted in Lee and Lee (2019), both aesthetics and the perceived model attractiveness, which serve as the stimuli, have numerous benefits: reduce the negative mood (the organistic states), and accordingly, influence the attitude of the customers towards the online shopping. Aesthetic value can also influence other types of values, such as healing or therapeutic value (Anderson, 2009), at the same time. reduce the emotional and psychological stresses (Glinzak, 2016).

The aesthetics should incorporate the design of the environment (Prince, 1988), which is a domain of environmental psychology (Qiu et al., 2020), aiming to provide salient visual attributes to appeal to customers and build credibility and customer trust (Lin and Chang, 2020).

While Holbrook's (1994; 1999; 2005) perspective is on consumer behaviors, there is also psychological understanding. Appearance and body image also has psychological implications regarding feelings, attitudes, perceptions, and behaviors (Nagl et al., 2021). The anchor's appearance, physical expression and voice can significantly influence customers' emotional or attitudinal responses (Ji and Prentice, 2021). Anchor is a part of the environment and layout, too, an essential factor in environmental psychology. Sample quotes below:

*“Apart from the utility of the products, I believe the live streaming commerce room layout is also important. It must match the anchor's appearance or makeup. The anchor's light makeup is appealing, the outfit and site layout are simple, and the tidy form will be appealing. Otherwise, I would easily be turned off”* - Environmental issues (No. 17)

*“I pay greater attention to the anchor's haircut and overall appearance when watching e-commerce anchors. My mood is directly affected by whether or not the hairstyle is appealing. I will skip it right away if I am not impressed.”* - Physical appearance and mood (No. 7).



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*“The anchor’s appearance is essential to me, followed by the ability of e-commerce anchors to manage the live-streaming. The quality of the live streaming environment is a deciding factor in whether or not I stay to watch the live streaming commerce.”* – Environmental psychology (No. 10).

As a result, environmental psychology is an essential topic that researchers and anchors employ to impact purchasing interest, such as design and social cues (Qian et al., 2022; Fei et al., 2020; Lu et al., 2021).

*“My opinion is that is critical the anchor approaches from the customer angle, and the best is to integrate the products with what the customers and viewers have in mind. In this way, the anchor can actively create the topics and activate an atmosphere to foster active engagement of the customers.”* (No. 17) – Active Engagement and Environmental Psychology.

Social- and e-commerce have shown that customers in active engagement can be made into brand ambassadors by pulling the loyal customers into a brand community (Santos et al., 2022).

The personality of the anchor, which the viewers and customers can feel and observe is also shared by the participants:

*“The proactive personality of the anchor often attracts me, and we often see the effect on the second-sales situation that excites the customers. I mean, literally, products the anchor introduced are sold in say, less than, 5 seconds.”* (No. 3) – Anchor personality, Hedonic value.

*“I’m hoping to see the anchor’s enthusiasm and hear the anchor’s impartial assessment of the product rather than bluster.”* (No. 6) – Personality with zeal and ethical duty.

*“Strong professional ability, familiarity with selling items, capacity to comprehend basic product knowledge, and dedication to work. This is the basic personality I look for in an anchor.”* - Personality of professionalism (No. 8).

*“The anchor must truly endorse the products, not for financial gain, as this demonstrates insincerity”* – ethics (No. 10).

The values offered by the products are vital, and responsibly doing so leads to a praiseworthy reputation and ethical image:

*“In the live streaming industry, I value premium product quality. I need to see the products’ overall effects, functionalities, and use value. I am hoping that the anchor can objectively explain the product’s benefits and drawbacks so that I may gain a better grasp of it. It is truly a bonus item if the product appears beautiful.”* – Aesthetic value, anchor responsibility, and values (No. 1).

*“The anchor should inform us of the manufacture date, the products’ guarantee, and give us the impression that the things are genuine and not counterfeit.”* (No. 4)

The value notion is widely acknowledged. In live-streaming commerce, the anchor must have the ability to bring the products into the life of potential customers, such as through values displayed and the anchor actually demonstrates how to use the product. One customer, for instance, states a desire for vicarious experience, which is referred to as “the vivid imaginary encounter with the products and services envisioned

by the viewers via the actual experience projected by the anchor” (Chen et al., 2019; Lo et al., 2022):

*“I hope that I can remotely control the anchor to do some comparisons and actions.”* (No. 8)

*“The anchor should demonstrate how we will utilize the products and give us a sense of how we feel. Even though I cannot touch or feel this sensation, I can perceive it through the anchor's experience.”* – The anchor's firsthand experience (No. 17).

Hwang, Park, and Kim (2020) show that displaying product values, combined with product knowledge, can positively influence customer perceptions:

*“I am likely to say positive things about..., to recommend..., and... to encourage others to the products when anchors are truly professional, ethical, responsible, and knowledgeable of the product usage”.* The most delicate part is that live broadcasters can develop product connections to potential customers' cognitive, social, functional, and emotional aspects of their lives.

There are challenges in the live-streaming sessions, such as consumers being interrupted by phone calls, and the limitation of window multi-tasking in the mobile operating system:

*“I frequently had to halt a live streaming commerce session because of interrupting call. There are also technological limits, such as I can easily watch live streaming commerce in multiple windows in my laptop, and not on my phone.”* – Technological constraints (No. 10).

The socio-technical aspects of live streaming commerce are still areas of limited discussion in the extant literature. Li et al. (2021) identify that a social system (consisting of interaction and identification) can influence emotional attachment to a system, and a technical system (represented by synchronicity and vicarious expression) can significantly influence a consumer's platform attachment.

In Ye and Tan (2022a), use the bibliometric map and present a more comprehensive socio-technical approach to explain three aspects of consumer responses, namely addiction, loyalty, and compulsive buying:

The social stimuli are social influence, interaction, personal innovativeness, impulsive buying tendency, and vicarious learning.

The technical stimuli include performance expectancy, effort expectancy, synchronicity, and quality of service and system.

Information and knowledge as the drivers for customer decision is also shown to be critical:

*“I am interested in cosmetics. The anchor should use comparison to convey the brand story and incorporate product facts, such as the face mask ingredient and moisturizing function, so we have enough information and knowledge to make an informed selection.”* - (No. 17).

## 5. Conclusion and Future Research

Because qualitative research expertise is relatively uncommon in the field

of live streaming commerce, this study fills the gap using an in-depth structured interviewing procedure. The study fulfills the following objective:

*to employ qualitative in-depth interviews to identify factors that influence the responses of viewers and consumers, and generate a revision of the S-O-R model.*

This study, in particular, *extends* the theory and model of the stimulus-organism-response (S-O-R) for live streaming commerce (Ye and Tan, 2022a, b, c, d), by incorporating *information and knowledge (I&K)*, and *behavior (B)*, leading to:

**S → I&K → O → R**

**S → O → B → R**

The *ethical aspect of stimuli* re-confirms a vital knowledge that is widely acknowledged in consumer behavior disciplines but the live-streaming commerce has rarely addressed: that is, ethics can influence consumers' perceptions and motivation (Kim, Krishna and Dhanesh, 2019).

Besides ethics, as also noted in the introduction, researchers should creatively investigate the different aspects of stimuli, for instance, the functions of products and services, the anchor's creative use of voices and site layout, the sociopsychological and objective nature of the live streaming session (Aladadoly and Salem (2022), technological, and alternative aspects.

The majority of the research in S-O-R framework conceptualizes the organism "O" in a very functional way and neglects the role of consumer mood. In voice retailing, research has shown the important role of *consumer mood*: referred to as consumers' affective state of interest. The stimulus, such as the speech features and speaker word choice, may convey information about the mood of the anchor (Halbauer and Klarmann, 2022), in turn, influences consumer mood. More broadly, the environment can easily influence consumer mood, and thus, changes their attitudes and behaviors (Furnham and Milner, 2013).

Consumer knowledge and information are crucial factors for decision-making. Consumers rely on cues and heuristics to overcome knowledge limitations and unfiltered information (Tajdini, 2021).

According to this study, stimulus should convey the information needed while simultaneously, influencing consumer perceptions and attitudes, as represented by S → I&K, and S → O, and S → I&K → O. Information and knowledge is an essential factor in developing consumers' capability, opportunity, and motivation (Ran et al., 2022).

The extended version S-O-B-R highlights the role of para-social interaction, which is a "digital interaction between viewers and social actors, conceptualized by the feeling of reciprocity that is comprised of mutual awareness, attention, and adjustment" (Lo et al., 2022: 327). The para-social atmosphere and relationship (the stimuli) and the feeling of reciprocity (organism) are intertwined. Reciprocity is manifested in mutual

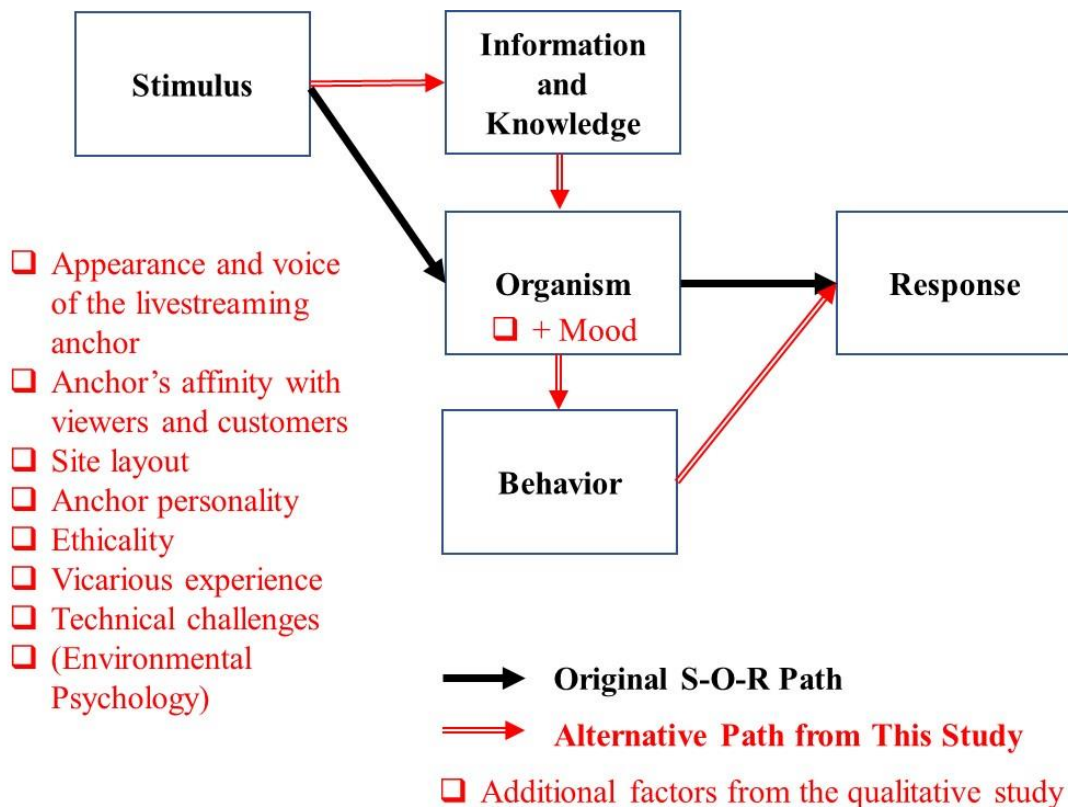


awareness, attention, and adjustment (Lo et al., 2022). The qualitative result reveals that behavioral terms in  $S \rightarrow O \rightarrow B \rightarrow R$  will create a more significant socio-psychological impact.

The study also identifies uniquely different factors rarely presented in the extant literature of live-streaming commerce, and the notable ones are:

- anchor personality, the expressed voices and presentation, ethicality, customer mood, the ability to introduce products into the life of viewers and customers, environmental psychology, affinity, vicarious experience, and technical challenges.

These factors can be grouped into “S” and “O” parts of the new theoretical model shown in Figure 1.



**Figure 1.** An Alternative Theoretical Model and Factors

Figure 1 is the theory generation of a typical qualitative method.

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